

ANTHURIUM THRIPS

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Common Name: Anthurium thrips
Scientific Name: *Chaetanaphothrips orchidii*
(Moulton)
Order: Thysanoptera
Family: Thripidae

Damage

Adults and immature thrips begin feeding within the unopened anthurium spathe soon after the bud emerges from the leaf axil. At flower harvest, the opened spathe appears deformed, with white streaks or scarring on the upper or lower surfaces. Thrips also cause deformity and bronzing or white streaks on young anthurium leaves. For a photograph of the damage, see HITAHR Brief No. 073, "Identifying Anthurium Flower Injuries," Figure 5a.

Other Hosts

Alternanthera, asystasia, bougainvillea, chrysanthemum, corn, night-blooming cereus, parsley, orchids, wandering jew, and several weed and grass species may harbor anthurium thrips.

Distribution

Found in Hawaii in 1926, anthurium thrips also occur in South America, Europe, Japan, Puerto Rico, and Florida.

Description and Life Cycle

Egg. Using a sharp ovipositor, the adult lays eggs in the bud or sheath.

Larva. Larval thrips are whitish and appear similar to adult thrips, but are smaller and lack wings. Inside the flower bud, the larvae suck plant juices with their sucking-rasping mouthparts.

Prepupa. Prepupae are similar to larvae but with wing pads. They do not feed. In severe infestations prepupae are known to occur in a silken cocoon on the plant.

Pupa. This stage has longer wing pads than

the prepupa. It does not feed and probably lives in the plant medium under the host plant.

Adult. The adult is about 1/25 inch long and has a yellow body with banded wings. About 80 to 100 eggs can be laid by one female. No males are known to occur, and reproduction takes place without mating. The developmental time from egg to adult is about 28 to 32 days depending on temperature. For a photograph of the adult, see HITAHR Brief No. 073, "Identifying Anthurium Flower Injuries," Figure 5b.

Pest Management

Control of the anthurium thrips is difficult for two reasons. First, thrips can injure flowers as early as six to eight weeks before they are harvested. Second, thrips prefer feeding within unopened spathes and are concealed throughout most of their life cycle. Feeding by only a few thrips can cause white streaks on a spathe.

Monitoring. Look for white streaks on harvested flowers. Thrips injury on anthurium flowers fluctuates considerably throughout the year depending on rainfall and temperature. Generally, thrips injury increases during the summer and decreases during the winter. Consequently, spray applications may be needed only during May through August. Monitor your thrips injury throughout the year, however, to accurately determine the action threshold level for thrips (the level at which control measures should be applied to prevent economic damage). The action threshold level is generally set at about 5 percent thrips injury on harvested flowers. The actual level depends on your cost of control treatment and the anticipated value of the flowers.

Control. Make three to four applications of an effective insecticide at two-week intervals. Be sure to apply insecticide to the area of bud development. This six- to eight-week period is needed to protect newly developing anthurium flowers from thrips injury.